Background: MicroRNAs have potential as urinary biomarkers for the non-invasive identification of new and recurrent bladder cancer. Unprocessed RNA rapidly degrades and the standard procedure for stabilising RNA cannot be performed in outpatient clinics. We compared a novel method of urinary sediment filtration and RNA stabilisation to the gold standard.
Method: Pooled normal urine samples were divided into 30 mL aliquots and either immediately filtered and stored in lysis buffer at 20C, or stored at 20C, and either filtered or centrifuged prior to disrupting the cells in lysis buffer. Samples were between baseline and 48 hrs or 7 days then transferred to -80C. RNA was extracted and reverse transcribed. MicroRNA and mRNA transcripts were quantified by real-time PCR.
Results: MicroRNA copies decreased by >50% within 48hr in filtered and centrifuged samples stored at 20C. Filtration was superior to centrifugation and RNA copy was maintained in the stabilising buffer for 48hr at 20C. Time course experiments extended to 7d this showed no significant alteration in copies for microRNA or mRNA.
Conclusion: The urine filter method is superior to centrifugation and can incorporate a lysis and stabilisation step as a simple, reproducible approach to obtaining RNA in an outpatient clinic.

0189 IS FOLLOW-UP REQUIRED FOR UNCOMPLICATED DISTAL URETERIC STONES <6 MM?

Vimoshan Arumuham, Sheel Mehta, Stefanos Almpanis, David Nicol, Leye Ajayi. *Royal Free Hampstead NHS Trust, London, UK*

Background: At our institution all patients with ureteric colic presenting through A&E are followed up in Stone Clinic. To assess the strain on limited resources, we performed a retrospective analysis to ascertain the value of follow-up in patients with uncomplicated distal ureteric stones <6mm in size.
Patients & Methods: Of the 320 patients who had a CT-KUB over one year, 180 patients had a ureteric calculus. Presentations that were managed conservatively either after a short admission (n=80) or directly discharged from A&E (n=77) were included. We obtained stone-size and position, hydronephrosis, concurrent stone burden, medical expulsive therapy, re-presentation rates and follow-up attendance.
Results: 157/180 were managed conservatively and had follow-up arranged at discharge. 129/157(82%) patients had a solitary stone <6mm in the ureter. 110/157(70%) had a distal ureteric stone. 90/157 (57%) were first-time stone formers. 80/157 (51%) patients did not attend outpatient clinic. Patients were contacted and 69/80 DNA as they were asymptomatic with 11 lost to follow-up. Re-admission was more likely in previous stone formers or patients with concurrent stone burden elsewhere in the urinary tract ($p<0.05$).
Conclusion: First-time stone formers presenting to A&E with uncomplicated solitary distal ureteric calculi <6mm may not routinely need follow-up.

0193 THERAPEUTIC CHALLENGES IN MANAGEMENT OF VULVAL INTRAEPITHELIAL NEOPLASIA (VIN): CONSERVATIVE VS RADICAL TREATMENT OPTIONS

Jessica Hui Cheah Lim [1], Farhad Alexander Sefre [1], Muhammad Waqas Ahmad Mangat [1], Grace Hui Chin Lim [2]. [1] *Department of Gynaeoncology of Glasgow Royal Infirmary, Glasgow, UK;* [1] *University of Glasgow, Glasgow, UK*

Background: The incidence of Vulval intraepithelial neoplasia (VIN) is rising in young patients. The management of VIN is not well established. Objective: To compare the efficacy of radical vulvectomy, wide local excision (WLE), CO2 laser ablation and various medical therapies in treatment of VIN.
Methods: All the literature in Pubmed and Medline were examined. 3075 patients from retrospective and prospective trials from 1968 to March 2009 were analysed. Recurrence rates, disease free intervals, advantages and disadvantages of each treatment were examined.
Results: Radical vulvectomy was best in reducing VIN recurrences (mean rate 17.6%). The combined technique (WLE+laser ablation) was next best (mean recurrence 25%), followed by WLE (26%) and laser ablation (30%). The most effective medical therapy was imiquimod (short-term mean recurrence 29.5%), followed by photodynamic therapy, PDT (43.8%).
Discussion: Vulvectomy is largely abandoned due to severe psychosexual sequels. The current standard practice is WLE. Laser ablation is more cosmetically acceptable and should be considered on younger women. Imiquimod and PDT are effective in short- term, but further prospective studies needed to establish long-term efficacy.
Conclusion: There is no single best treatment. Specific treatments should be tailored to individual patients depending on nature of VIN, clinician's experience and patients' preference.

0198 ACCESS TO NOVEL CANCER SURGERY: IS IT EQUITABLE?

Jonathan Clarke [1], Sophie Holmes [1], Yoryos Lyratzopoulos [2]. [1] *School of Clinical Medicine, University of Cambridge, Cambridge, UK;* [1] *Institute of Public Health, University of Cambridge, Cambridge, UK*

Background: A better understanding of factors influencing the uptake and dissemination of new surgical procedures is essential in order to reduce variation and improve quality of care. Purpose: To use Hospital Episode Statistics to monitor regional variation in access to novel surgical procedures for cancer therapy.
Methods: We focused on the 12 cancer-related new procedures for which NICE has produced guidance and which directly match procedure codes in the OPCS-4 interventional procedures classification system. We then used Hospital Episode Statistics (HES) data to analyse relevant healthcare activity from 2000 to 2009.
Results: Procedure use is driven initially by 'early implementer' hospitals but diffuses over time. Regional variation is associated with the presence of innovator hospitals, without a systematic under- or over-utilisation between different English regions.
Conclusion: The diffusion of new interventional procedures is led by innovator hospitals but appears to follow no other systematic geographical pattern. In their infancy, surgical procedures remain strongly restricted to the regions surrounding 'innovator hospitals'. A patient's access to a novel interventional procedure for cancer treatment is therefore determined by their region of residence. Monitoring of procedure use is constrained by the lack of specific codes for new procedures, and we strongly support initiatives for the timely creation of such codes.

0200 IS THERE A ROLE FOR ABDOMINAL RADIOGRAPHS IN THE INITIAL ASSESSMENT OF PATIENTS PRESENTING WITH NON-TRAUMATIC ABDOMINAL PAIN?

Venkitaraman Sathya, Kunal Shetty, Mac Armstrong. *Plymouth Hospitals NHS Trust, Plymouth, Devon, UK*

Aim: Abdominal radiographs (AXR) are indiscriminately requested despite it having a low diagnostic yield. The aim was to determine the proportion of patients presenting to the Surgical Admissions Unit (SAU) with non-traumatic abdominal pain who underwent AXR with abnormal findings at the time of initial assessment.
Methods: The audit was for a period of two months where data was collected prospectively and all AXRs were reported by a single consultant radiologist.
Results: A total of 515 patients presented to SAU with non-traumatic abdominal pain during the study period and 32.4% of them underwent an AXR on admission as part of the initial assessment. Our analysis showed that a higher percentage (54.1%) of elderly patients underwent an AXR. Only 16.8% of all AXRs detected abnormalities while the rest were either reported as normal or had non-specific findings.
Conclusion: We conclude that AXR should not be used as a routine screening tool for patients presenting with the above as it has a low diagnostic yield. Other modalities such as ultrasonography scans or computerised tomography scans as the primary imaging modality must be considered if indicated. Better education and awareness among junior doctors could further reduce the proportion of patients undergoing unnecessary AXR.

0203 BREAST CANCER AND ATYPICAL HYPERPLASIA IN REDUCTION MAMMOPLASTY SPECIMENS: 10-YEAR EXPERIENCE

Samuel Coulson [1], Amit Goyal [2], Kim Suvarna [3], Malcolm Reed [4], Chris Caddy [2]. [1] *Sheffield Medical School, Sheffield, South Yorkshire, UK;*